AMENDMENTS TO THE CLAIMS

1-8 (Cancelled)

9. (Currently Amended) An apparatus for detecting a fault of an optical switch, the apparatus comprising:

a ~~splitter that splits a plurality of~~ plurality of splitters that respectively split optical signals output from an optical switch to generate split optical signals of a same frequency;

a plurality of optical detecting and output power transition sensing units that detect output power transitions of the split optical signals; and

a fault determiner that receives information on setting the optical switch from an external source, compares the information with the detected output power transitions of the split optical signals, and determines whether the optical switch malfunctions depending on whether the information coincides with the detected output power transitions of the split optical signals.

10. (Original) The apparatus of claim 9, further comprising an error signal generator that generates an error signal corresponding to a fault-determining signal received from the fault determiner.

11. (Original) The apparatus of claim 9, wherein the plurality of optical detecting and output power transition sensing units detect output transitions of amplified spontaneous emission signals generated by optical amplifiers positioned at input ports of optical switching systems such as optical cross-connectors.

12. (Original) The apparatus of claim 9, wherein the fault determiner receives information on setting the optical switch from an external source, compares the information with the detected output transitions of the split optical signals or output transitions of the amplified spontaneous emission signals, and determines whether the optical switch malfunctions depending on whether the switch setting information coincides with the detected output transitions of the split optical signals or the output transitions of the amplified spontaneous emission signals.

13. (Cancelled)